

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

5905-620	

Date of Issuance:

5/2/18

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance:

EPA Reg. Number:

Conditional

Name of Pesticide Product:

Omni Brand Acephate 97 SG

Name and Address of Registrant (include ZIP Code):

Bill Washburn, Registration Manager Helena Chemical Company 225 Schilling Blvd., Suite 300 Collierville, TN 38017

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/registration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Date:

5/2/18

Richard Gebken

Product Manager 10

Invertebrate & Vertebrate Branch 2

Registration Division (7505P)

Office of Pesticide Programs

EPA Form 8570-6

- 2. You are required to comply with the data requirements described in the DCI identified below:
  - a. a. Acephate GDCI-103301-917

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <a href="http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1">http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1</a>

- 3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.
- 4. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 5905-620."
- 5. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

• Basic CSF dated 1/17/2018

If you have any questions, please contact Richard Gebken via email at gebken.richard@epa.gov

Sincerely,

Richard Gebken

Product Manager 10

Invertebrate & Vertebrate Branch 2

Registration Division (7505P)

Office of Pesticide Programs

Enclosure

# ACCEPTED

# 05/02/2018

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 5905-620

ACEPHATE GROUP 1B INSECTICIDE

# Omni Brand Acephate 97 SG

# Agricultural & Fire Ant Insecticide

For Use on beans, celery, cole crops, cotton, cranberries, mint, non-bearing citrus, non-crop areas, peanuts, peppers, soybeans, tobacco, container nursery stock, ornamental trees and shrubs, golf course and sod farm turfgrass, outdoor floral crops and ground covers, and greenhouse floral and foliage crops.

ACTIVE INGREDIENT: % BY WT.	
Acephate (0, S-Dimethyl acetylphosphoramidothioate)	97.0%
OTHER INGREDIENTS:	3.0%
TOTAL:	100.0%
Omni Brand Omni Brand Acephate 97 SG is a granular insecticide.	

# KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCION

Si usted no entiende la etiqueta, busque a alquien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID				
Contains an organophosphate that inhibits cholinesterase				
F	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>			
SWALLOWED:	Have person sip a glass of water if able to swallow.			
	<ul> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> </ul>			
	<ul> <li>Do not give anything to an unconscious person.</li> </ul>			
F IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> </ul>			
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue</li> </ul>			
	rinsing eye.			
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
F ON SKIN OR	Take off contaminated clothing.			
CLOTHING:	<ul> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> </ul>			
	Call a poison control center or doctor for treatment advice.			
F INHALED:	Move person to fresh air.			
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial</li> </ul>			
	respiration, preferably mouth-to-mouth if possible.			
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>			
Note to Physician:	: Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear,			
atropine in antidot	tal. 2-PAM may also be used in conjunction with atropine but should not be used			
alone.				
Have the product	container or label with you when calling a poison control center or doctor or going for			
treatment. For emergency medical treatment information, call ChemTrec 24 hours a day at 1-877-250-				
9291.	•			
F IN EYES:  F ON SKIN OR CLOTHING:  F INHALED:  Note to Physician: atropine in antidot alone.  Have the product or reatment. For em	<ul> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>Do not give anything to an unconscious person.</li> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> <li>Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, tal. 2-PAM may also be used in conjunction with atropine but should not be used</li> <li>container or label with you when calling a poison control center or doctor or going for</li> </ul>			

EPA Reg. No. 5905-xxx EPA Est. No AD xxxxxx	Manufactured for: Helena Chemical Company 225 Schilling Boulevard, Suite 300 Collierville, TN 38017
NET CONTENTS:	

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Harmful if swallowed or inhaled. Causes eye irritation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash clothing before reuse.

# Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. Other options include natural rubber >14 mils and polyethylene.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, or butyl rubber >14 mils or nitrile rubber >14 mils or neoprene rubber >14 mils or polyvinyl chloride or Viton >14 mils
- Shoes plus socks
- A NIOSH approved particulate respirator with any N, R, or P filter, NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C.
- In addition, mixers, loaders, and applicators supporting or making broadcast applications to turf
  must wear: A NIOSH approved particulate respirator with any N, R, or P filter, NIOSH approval
  number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter
  with NIOSH approval number prefix TC-21C.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **Engineering controls statements**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides {40 CFR 170.240(d)(6)].

The use of human flaggers is prohibited.

## **User Safety Recommendations**

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. Wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to birds. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Cover with soil or soil-incorporate spills.

Exposed treated seed may be hazardous to birds and other wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Eliminations System (NPDES) permitted and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

# OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, AND ESTUARIES.

- Apply only during alternate years in fields adjacent to aquatic areas listed above.
- Do not apply by ground or air within 100 feet of aquatic areas listed above.
- Do not cultivate within 10 feet of an aquatic area to allow growth of a vegetative filter strip.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or Viton
- Shoes plus socks

# **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standards for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forest, nurseries or greenhouses.

Keep all unprotected persons out of operating areas, or vicinity where there may be drift. Do not enter or allow others to enter treated areas until sprays have dried.

## **ROTATIONAL CROPS**

Treated areas may be replanted with any crop specified on this label as soon as practical after last application. Any crop not specified on this label may be planted into treated areas 120 days after last application.

## PRODUCT INFORMATION

OMNI BRAND ACEPHATE 97 SG is an insecticide for control of pests on selected agricultural crops and in certain noncrop areas. The active ingredient in OMNI BRAND ACEPHATE 97 SG is acephate, a water soluble insecticide readily absorbed by plant roots and foliage to give systemic control of feeding insects. Insect pests are controlled more effectively by OMNI BRAND ACEPHATE 97 SG through ingestion than by contact. Application of OMNI BRAND ACEPHATE 97 SG to maintain control should be repeated only as directed by the label.

FAILURE TO FOLLOW THE DIRECTION FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY, AND/OR ILLEGAL RESIDUES.

NOTE: This product is sold by weight and package is full when packed, but due to the product's nature, settling is likely to occur.

When an adjuvant is to be used with this product, HELENA CHEMICAL suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

# RESISTANCE MANAGEMENT RECOMMENDATIONS (FOR INSECTICIDE)

Omni Brand Acephate 97 SG contains a Group 1B insecticide. Insect/mite biotypes with acquired resistance to

Group (target site of action group number) may eventually dominate the insect/mite population if Group 1B insecticides/acaricides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Omni Brand Acephate 97 SG or other Group 1B.

To delay insecticide resistance consider:

- Avoiding the consecutive use of Omni Brand Acephate 97 SG or other group 1B insecticides/acaricides that have a similar target site of action, on the same insect/mite species.
- Using tank-mixtures or premixes with insecticides/acaricides from a different target site of action
- Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide/acaricide use on a comprehensive IPM program.
- Monitoring treated insect/mite populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide/acaricide resistance management and/or IPM recommendations for the specific site and resistant pest problems.

#### **APPLICATION PROCEDURES**

**Spray Volume:** Omni Brand Acephate 97 SG may be applied in a minimum of 10 gallons of spray solution per acre by ground sprayer or in a minimum of 5 gallons of spray solution per acre by aircraft spray equipment. Check equipment calibration frequently. Complete coverage and uniform application are essential for the most effective results, especially when lower spray volumes are applied. If necessary, increase the spray volume per acre for complete crop coverage.

**Chemigation:** Applications to cranberries may be made using sprinkler irrigation systems. Do not apply by chemigation to any other crop, or to cranberries using any other type of irrigation system. For overhead chemigation, apply only when wind speed is 10 mph or less.

# **Spray Drift Management**

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment-and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions regarding spraying.

Do not apply under conditions involving possible drift to food, forage, or other plantings that might be damaged or the crops thereof rendered unfit for sale, use, or consumption.

Do not allow spray to drift from the application site and contact people, structures people occupy at any time, and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

Apply only as a medium or coarser spray (ASABE standard 572.1) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Apply only when the wind speed is 2 - 10 mph at the application site.

# For ground applications:

• Do not apply with a nozzle height greater than 4 feet above the crop canopy.

# For air blast applications:

• Direct spray above foliage and turn off outward pointing nozzles at row ends and outer rows.

# For aerial applications:

- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or 90% of the rotor blade diameter. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45°.
- If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Spray Drift Management** section.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap as crop injury may result. For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

#### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see *Wind, Temperature and Humidity and Temperature Inversions* sections). Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. Apply in a minimum of 5 gallons of spray solution per acre by aircraft spray equipment.

# **Controlling Droplet Size**

- **Volume -** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle-type that is designed for the intended application. With most nozzle
  types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid
  stream nozzles oriented straight back produce the largest droplets and the lowest drift.

# **Boom Length**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

# **Application Height**

Applications should be made at the lowest height consistent with efficacy and flight safety. Do not make at a height greater than 10 feet above the top of the largest plants unless a greater height is recommended for aircraft safety.

Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

# **Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

## **Temperature and Humidity**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

# **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

#### **Sensitive Areas**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

#### Mixing procedures

- 1. Be sure sprayer is clean and not contaminated with any other materials or crop injury or sprayer clogging may result.
- 2. Fill tank 1/4 full with clean water.
- 3. Start agitation.
- 4. Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface.
- 5. Pour product directly from container into partially filled spray tank.
- 6. Continue filling tank until 90% full. Increase agitation if necessary to maintain surface action.
- 7. Add emulsifiable oil, oil concentrate, or tank mix herbicide(s) after this product is thoroughly suspended.
- 8. Finish filling tank.

When an adjuvant is to be used with this product, HELENA CHEMICAL suggests the use of a Chemical Producers and Distributors Association (CPDA) certified adjuvant. When mixing with other products, observe the most restrictive precautions, use restrictions, and other limitations on the labels for all products involved.

#### COMPATABILITY

**Compatibility:** To determine the compatibility of Omni Brand Acephate 97 SG with other products, the following procedure should be followed: Pour the recommended proportions of the products into a suitable container of water, mix thoroughly and allow to stand at least five (5) minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible. For further information, contact your local HELENA CHMICAL representative.

## RESTRICTIONS

- For use on turf, use is limited to sod farms and golf courses, except when applying to mound or spot treatments for fire ant and harvester ant control.
- Not for indoor residential use.
- For greenhouse use, use is limited to commercial greenhouses for use on tobacco (floatbed)), ornamental, floral, and foliage plants. Do not use low pressure hand wand application equipment except when applying as a fire ant mound treatment or on ornamental trees, shrubs, and floral plants when grown for non-commercial use.
- Use on succulent green beans as a food crop is prohibited (includes string beans, snap beans, and wax beans). Succulent green bean use is permitted ONLY if grown for seed.

BEANS AND LIMA BEANS: (Crop Group 6) Dry and Succulent Forms (except succulent green beans which includes string beans, snap beans, and wax beans and succulent green beans grown only for seed.)

	AMOUNT	ADDITIONAL USE INSTRUCTIONS
INSECTS	OMNI BRAND ACEPHATE	
	97 SG	
	PER ACRE	
Fleahoppers Grasshoppers	1/4 to 1/2 lbs.	Apply in water at a minimum of 20 to 100 gals.
	(4.0 to 8.0 oz.)	spray per acre by ground or 2 gals. spray per
Aphids	1/2 to 1.0 lb.	acre by air.
(excluding Black bean	(8.0 to 16.0 oz.)	
Aphid)		Apply when eggs or insects first appear.
Bean Leaf Beetle		
Bean Leafroller		For severe insect infestations, use higher listed
Cabbage Looper		rates.
Cutworms		
Green Cloverworm		
Leafhoppers		
Mexican Been Beetle		
Plant Bugs (Lygus)		
Soybean Looper		
Thrips		
Whitefly		
Except		
Sweetpotato/		
Silverleaf Whitefly)		
Armyworms (excluding Beet	3/4 to 1.0 lb.	
Armyworm)	(12.0 to 16.0 oz.)	
Corn Earworm		
European Corn Borer		

#### **Use Restrictions**

- Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- For repeat applications use a minimum spray interval of 3 days for application rates up to and including 1/2 lb, product per acre and a minimum of 7 days for rates exceeding 1/2 lb, product per acre.
- Allow 1 day between application and harvest on lima beans (succulent form) and 14 days between application and harvest on snap-beans (dry beans).
- Do not feed treated vines to livestock.

Use in succulent green beans as a food crop is prohibited (including string beans and wax beans). Use in succulent green beans is permitted only if grown for seed.

# RESTRICTIONS FOR SUCCULENT GREEN BEANS GROWN FOR SEED

- Do not feed crop residues to livestock or allow animals to graze treated areas.
- Do not apply to succulent beans grown for fresh market or processing.
- No portion of the succulent bean plant may be used or distributed for food or feed purposes.
- Seeds grown from succulent beans shall bear a tag or container label which forbids use of the seed for human consumption or animal feed.
- · Seeds grown from succulent beans may not be distributed for human consumption or animal feed.

**CELERY: (Crop Group 4B)** 

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Green Peach Aphid	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	Apply in water at 50 to 100 gals. spray per acre by ground or in a minimum of 5 gals. per acre
Fall Armyworms Cabbage Looper	1.0 lb. (16.0 oz.)	by air. Apply when eggs or insects appear.

#### **Use Restrictions**

- Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- For repeat applications use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Preharvest interval is 21 days.
- All celery must be trimmed (tops removed) before shipment for use.
- Do not use trimmed tops for food or feed.

**COLE CROPS: (Brussels Sprouts and Cauliflower)** 

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Green Peach Aphid	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	Apply in water at 25 to 150 gals. spray per acre by ground or a minimum of 5 gals. spray per
Cabbage Looper	1.0 lb.	acre by air.
Diamondback Moth Larvae	(16.0 oz.)	Use the higher rate when heavy infestations of aphids are present.
Imported Cabbage Worm		Begin application when insects or eggs first appear.
		Diamondback Moth Larvae: This insect has demonstrated an ability to develop resistance to various classes of insecticides. Consult your local Agricultural Extension Service for current recommended control practices for this insect.

#### **Use Restrictions**

- Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- For repeat applications use a minimum spray interval of 3 days for application rates up to and including 1/2 lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Preharvest interval is 14 days.
- Do not feed trimmings to livestock or allow animals to graze in treated areas.

# **COTTON**

## **RESTRICTIONS FOR ALL COTTON USES:**

- Do not apply more than 4 1/8 lb. (4 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, foliar, and seed treatment.
- For foliar treatment repeat applications, use a minimum spray interval of 7 days.
- For in-furrow treatments, make only one application per season.
- Do not feed treated forage or gin trash to livestock.
- Do not allow animals to graze on treated areas.
- For aerial application on cotton, do not apply more than 1.0 lb. OMNI BRAND ACEPHATE 97 SG /acre in California and Arizona, and 0.75 lb. OMNI BRAND ACEPHATE 97 SG/ acre for all other areas of the U.S. per treatment

## **RESISTANCE MANAGEMENT**

Cotton pest control programs, especially those for control of Sweetpotato/Silverleaf Whitefly populations, should employ a properly designed resistance-management strategy. Such resistance-management strategies include mixture or rotation of alternative classes of chemistry including organophosphates, carbamates, pyrethroids or insect growth regulators. Consult your state or area agricultural extension service for local resistance management strategies and advice on alternative insecticides.

#### **COMMERCIALLY TREATED COTTONSEED**

**APPLICATION INSTRUCTIONS:** OMNI BRAND ACEPHATE 97 SG contains a water-soluble systemic insecticide which helps to reduce injury to cotton seedlings by several insects. OMNI BRAND ACEPHATE 97 SG can be mixed in the slurry tank with most of the fungicide seed treatments in common use. It also can be applied as a separate treatment using enough water to give adequate coverage of the seed.

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER 100 LBS. COTTONSEED	EFFICACY	
Cotton Aphids	0.28 – 0.4 lb.	Gives effective reduction of thrips and cotton aphids	
Thrips (including Western	(4.5 – 6.4 oz.)	for up to three weeks	
Flower Thrips)	Note: lower rate not	after planting	
	approved for use in		
California			
Black (Greasy) Cutworm	0.28 – 0.4 lb.	Gives effective reduction of Black (Greasy) Cutworm	
(4.5 - 6.4  oz.)		from planting through the 3rd to 4th leaf stage of	
	Note: lower rate not	development. When planting into fields where large	
	approved for use in	cutworms are present (5th instar and larger),	
	California	economic damage may occur.	

#### Use Restrictions

- When using formulations that do not contain dye, compliance with 21 CFR Chapter 1, Section 2.5 requires that all seed treated with a pesticide must be colored to distinguish from, and prevent inadvertent use as, food for man or feed animals.
- Not for use on agricultural establishments in hopper-box, planter-box, slurry-box or other seed treatment applications at, or immediately before, planting.
- Do not apply more than 4 1/8 lb. (4 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, seed treatment, and foliar.
- Treated seed must not be used for, or mixed with, food or animal feed, or processed for oil.
- Observe all precautions and limitations on labeling of all products used in mixtures.
- Store away from feeds and other foodstuffs.
- Wear long-sleeved shirt, long pants and chemical-resistant gloves when handling treated seed.
- Dispose of seed packaging in accordance with local requirements.
- Exposed treated seed may be hazardous to birds and wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water. Cover or soil-incorporate spilled treated seeds.
- Treated seeds must be planted into the soil at the depth of 1 inch or greater.

## **Seed Container Label Requirements**

Seed commercially treated with OMNI BRAND ACEPHATE 97 SG Seed Treatment must be labeled in compliance with the Federal Seed Act.

In addition, all bags containing treated seed must be labeled or tagged with the following information:

- -This seed has been treated with acephate insecticide.
- Do not use for food, feed or oil purposes.
- User is responsible for ensuring that the seed container label is in compliance with all of the requirements of the Federal Seed Act.

In addition, the EPA requires all bags containing treated seed must be labeled or tagged with the following information:

- This seed has been treated with OMNI BRAND ACEPHATE 97 SG, which contains x mg\* active ingredient (ai) per seed. \*to be filled in
- Do not apply more than 4.0 lbs. a.i./A per crop cycle. This includes all uses of acephate such as commercial seed treatments, in-furrow spray, and foliar applications.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practice.
- Store away from feeds and other foodstuffs.
- Wear long-sleeved shirt, long pants, and chemical-resistant gloves when handling treated seed.
- Dispose of seed packaging in accordance with local requirements.
- Exposed treated seed may be hazardous to birds and wildlife. Dispose of all excess treated seed and seed packaging by burial away from bodies of water. Cover or soil-incorporate spilled treated seeds.
- Treated seeds must be planted into the soil at the depth of 1 inch or greater.

#### Notes:

Follow all precautions and limitations on labeling of all products used in mixtures.

#### **COTTON IN-FURROW APPLICATION**

AMOUNT OMNI BRAND ACEPHATE 97 SG	ADDITIONAL USE INSTRUCTIONS
PER ACRE	
1/2 to 1.0 lb.	Apply OMNI BRAND ACEPHATE 97 SG in 3
(8.0 to 16.0 oz.)	to 5 gals. of water per acre as an in- furrow
	spray.
NOTE: for the	
Blacklands of Texas	OMNI BRAND ACEPHATE 97 SG can be
use 1.0 lb. per acre	mixed with fungicides that are sprayed in-
OMNI BRAND ACEPHATE 97 SG	furrow for disease control.
	Flat-fan nozzles used for in-furrow application should be set so that the fanned spray pattern is aligned with the row to insure good spray deposition in the seed furrow. Cone type nozzles may not provide a spray pattern that insures maximum spray deposition in the seed furrow, and should be avoided. Spray systems that employ metal or plastic tubing for delivery of spray solution into the seed furrow should have tubing securely fastened to the furrow opener and should be checked frequently to insure that the tubing is properly positioned to deposit spray solution into the seed furrow.
	OMNI BRAND ACEPHATE 97 SG PER ACRE 1/2 to 1.0 lb. (8.0 to 16.0 oz.)  NOTE: for the Blacklands of Texas use 1.0 lb. per acre OMNI BRAND ACEPHATE 97

- Do not apply more than 4 1/8 lb. (4.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.
- For in-furrow treatments, make only one application per season.
- Preharvest interval is 21 days.
- Do not use treated seed for food/ feed purposes or processed for oil.

# **COTTON FOLIAR APPLICATION**

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS	
		per acre by ground or 3 to 10 gals. spray per acre by ggs or insects first appear.	
Thrips	2.5 to 3.0 oz.	Apply when eggs or insects first appear.	
Plant Bugs (Lygus)	1/4 to 1.0 lb.	Apply when eggs or insects first appear.	
0 (70 )	3/4 to 1.0 lb.	Use higher listed rate for Lygus adults that have	
	(CA & AZ)	migrated into cotton.	
Fleahopper	1/4 lb.	Apply when eggs or insects first appear.	
	(4.0 oz.)	<u> </u>	
Cotton Aphid (excluding AZ and CA)	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	This insect may develop resistance to various classes of insecticides. Consult your local Agricultura Extension Service for current control recommendations.	
Whitefly (excluding Sweetpotato/ Silverleaf Whitefly)	1/2 to 1.0 lb. (8.0 to 16.0 oz.)		
Armyworms (excluding Beet Armyworm) Cabbage Looper	1.0 lb. (16.0 oz.)	Apply when eggs appear.	
Bollworm	East of Rockies:	Early season light infestation use 1/2 lb. product per	
Tobacco Budworm	1/2 to 1.0 lb.	acre.	
Adults	(8.0 to 16.0 oz.)	The state of the s	
Larvae		Mid and late season moderate to severe infestations	
Eggs (DEADHATCH®)	1.0 lb.	use3/4 to 1.0 lbs. per acre.	
	(CA & AZ)	Apply when eggs appear.	
		Moths are controlled when they come in direct contact with spray particles during application. Moth kill is most likely to occur when application is made late in the evenings during periods of peak activity.	
		DEADHATCH®: Control of emerging larvae by consumption of treated egg casings. Use 1/4 to 1/2 lb. per acre.	
Stinkbugs	3/4 lb. (12.0 oz.)	Apply when eggs appear.	
Pink Bollworm	1.0 lb.	Apply when insects appear.	
(AZ & CA)	(16.0 oz.)	Apply mon models appear.	
Cutworms	3/4 lb. (12.0 oz.)	Ground application is recommended. Aerial applications are less effective, but may be used.	
		Control is most effective when ground application is made in the evenings and sprays are directed toward the base and lower portion of plant.	
		Apply when insects first appear or damage is first noted.	
Use Restrictions			

- For aerial application on cotton, do not apply more than 1.0 lb. OMNI BRAND ACEPHATE 97 SG /acre in California and
- Arizona, and 0.75 lb. OMNI BRAND ACEPHATE 97 SG/ acre for all other areas of the U.S. per treatment.
- Do not apply more than 4 1/8 lb. (4.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.
- For foliar treatment repeat applications, use a minimum spray interval of 7 days.
- For in-furrow treatments, make only one application per season.
- Preharvest interval is 21 days.
- Do not feed treated forage or gin trash to livestock.

• Do not allow animals to graze on treated areas.

# COTTON TANK MIXES RESTRICTIONS TO FOLLOW WITH ALL FOLIAR TANK MIX PARTNERS:

- Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.
- For repeat applications, use a minimum spray interval of 7 days.
- Do not feed gin trash or treated forage to livestock.
- Do not allow livestock to graze on treated areas.

Always read and follow all label directions when using any pesticide alone or in tank mix combinations. Observe all restrictions and precautions, which appear on all product labels. The most restrictive labeling applies when using a tank mix.

For all applications: Apply in vair (minimum 5 gals. per acre in Sweetpotato/Silverleaf Whitefly  Armyworms (excluding Beet Armyworm) Bollworms		Comply with all applicable directions, restrictions, and precautions on the EPA registered label for DANITOL® 2.4 EC spray.  Use a minimum application rate of 10 2/3 fl. oz.
Sweetpotato/ Silverleaf Whitefly  Armyworms (excluding Beet Armyworm)	1/2 to 1.0 lb. (8.0 to 16.0 oz.) OMNI BRAND ACEPHATE 97 SG + 8.0 to 16.0 fl. oz.	precautions on the EPA registered label for DANITOL® 2.4 EC spray.
Beet Armyworm)		DANITOL® 2.4 EC in CA and AZ.  Apply when insects first appear or when damage is first noted and repeat application as necessary to maintain control.
Cabbage Looper Cotton Aphid Cutworms* Fleahopper Grasshoppers Pink Bollworm Plant Bugs (Lygus, Mirids) Salt Marsh Caterpillar Thrips Tobacco Budworm Whitefly (excluding Sweetpotato/Silverleaf Whitefly)	1/4 to 1.0 lb. (4.0 to 16.0 oz.) OMNI BRAND ACEPHATE 97 SG + 1.0 to 2.0 pts. VULCAN	Apply in water at 10 to 25 gals. spray per acre by ground or 3 to 10 gals. spray per acre by air (minimum 5 gals. per acre in CA).  Ground application is recommended. Control is most effective when ground application is made in the evenings and sprays are directed toward the base and lower portion of plant.  Aerial applications are less effective, but may be used.  Comply with all applicable directions, restrictions, and precautions on the EPA registered label for VULCAN.  *Cutworms: Use 3/4 lb. per acre of Omni Brand Acephate 97 SG.  Apply when insects first appear or when damage is first noted and repeat application as necessary to

- For aerial application on cotton, do not apply more than 1.0 lb. OMNI BRAND ACEPHATE 97 SG /acre in California and
- Arizona, and 0.75 lb. OMNI BRAND ACEPHATE 97 SG/ acre for all other areas of the U.S. per treatment.
- Do not apply more than 4 1/8 lb. (4.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.
- Use a minimum spray interval of 7 days.
- Preharvest interval is 21 days.

# **COTTON TANK MIXES WITH PYRETHROIDS (FOLIAR)**

Synthetic Pyrethroids should be used within the guidelines of state and/or regional resistance management programs and recommendations.

Always read and follow all label directions when using any pesticide alone or in tank mix combinations. Observe all restrictions and precautions, which appear on all product labels. The most restrictive labeling applies when using a tank mix.

INSECTS	OMNI BRAND ACEPHATE 97 SG AND TANK MIX PARTNER	AMOUNT OF OMNI BRAND ACEPHATE 97 SG + TANK MIX PARTNER PER ACRE	ADDITIONAL USE INSTRUCTIONS
Aphids Bollworm Cabbage Looper Cotton Leaf Perforator Cutworms Fall Armyworm Fleahoppers Pink Bollworm (AZ&CA) Plantbugs	OMNI BRAND ACEPHATE 97 SG  + one of the following CYPERMETHRIN 2.5 EC	1/2 to 1.0 lb. (8.0 to 16.0 oz.) + one of the following  Refer to the CYPERMETHRIN 2.5EC approved label for use instructions.	Apply in water at 10 to 25 gals. spray per acre by ground, or 3 to 10 gals. spray per acre by air (minimum 5 gals. per acre in CA).  Ground application is recommended.
Stinkbugs Sweetpotato/ Silverleaf Whitefly Thrips Tobacco Budworm Whitefly	ASANA® XL	Refer to the ASANA® XL approved label for use instructions.	Control is most effective when ground applications are made in the evenings and sprays are directed toward the base and lower portion of
Williamy	BAYTHROID® 2 EC	Refer to the BAYTHROID⊚2 EC approved label for use instructions.	plant.  Aerial applications are less effective, but may be used.
	FANFARE EC	Refer to the FANFARE EC approved label for use instructions	Apply when eggs or insects first appear or damage is first noted.  Stinkbugs: Use 3/4 lb. per
	SILENCER VXN	Refer to the SILENCER VXN approved label for use instructions	acre of OMNI BRAND ACEPHATE 97 SG  Cutworms: Use 3/4 lb. per acre of OMNI BRAND ACEPHATE 97 SG

- For aerial application on cotton, do not apply more than 1.0 lb. OMNI BRAND ACEPHATE 97 SG /acre in California and Arizona, and 0.75 lb. OMNI BRAND ACEPHATE 97 SG/ acre for all other areas of the U.S. per treatment.
- Do not apply more than 4 1/8 lb. (4.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle. This limitation includes all methods of application; i.e. in-furrow, and foliar.
- Use a minimum spray interval of 7 days.
- Preharvest interval is 21 days.

CRANBERRIES (FOLIAR): (Crop Group 13-07 A)

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Cranberry Blossom	1.0 lb.	Apply in water by air, ground or with sprinkler irrigation
Worm	(16.0 oz.)	systems.
Gypsy Moth		
False Armyworm		Use sufficient water to give thorough coverage with
Fireworms		ground or sprinkler equipment.
Spanworms		
Sparganothis		Use a minimum of 2 gals. spray per acre by air.

#### Use Restrictions

- Do not apply more than 1.0 lb. (1.0 lb. ai) OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- Do not make more than one application per growing season.
- Preharvest interval is 75 days for MA, NJ, WA, and WI; and 90 days for other states.
- Do not apply from start of bloom until all berries set.

**SPRINKLER IRRIGATION APPLICATION TO CRANBERRIES:** This product may only be applied through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, travelers, big gun, solid set, or hand move. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place.

A person knowledgeable of the chemigation system and responsible for its operation should shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

**Solid Set Systems:** Apply specified dosage for the entire length of the irrigation period or for a 30 to 60 minute period at the end of a regular irrigation set or as a 30 to 60 minute injection as a separate application not associated with a regular irrigation. Allow time for all lines to flush the pesticide through all

nozzles before turning off irrigation water. To insure the lines are flushed and free of remaining pesticide, a dye indicator may be injected into the lines to mark the end of the application period. See information below.

**Center Pivot Systems:** Inject the specified dosage per acre continuously for one complete revolution of the system. See information below.

**Information:** Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application. Inject the product with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.

Application of more than label listed quantities of irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness.

**HEAD LETTUCE (Crisphead type only)** 

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Aster Leafhopper	1/2 to 1.0 lb.	Apply in water at 10 to 60 gals. of spray per
Green Peach Aphid	(8.0 to 16.0 oz.)	acre (broadcast) by ground or 5 gals. of spray
Cabbage Looper	1.0 lb.	per acre by air.
Armyworms	(16.0 oz.)	
(excluding Beet Armyworm)		Applications may be made in spring, summer, and early fall in all areas and winter applications may be made in AZ, CA, FL, and TX; and late
		fall applications may be made in Arizona.

#### **Use Restrictions**

- Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including ½ lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Preharvest interval is 21 days.
- Do not apply after first head begins to form in crops that germinate from mid-September through November in desert areas of AZ and CA.
- Do not feed trimmings to livestock or allow animals to graze on treated areas.

**MINT Spearmint and Peppermint** 

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Alfalfa Looper Aphids Cutworms Strawberry Root Weevil Adult Black Vine Weevil Adult	1.0 lb. (16.0 oz.)	Foliar application. Apply in water at 20 to 100 gals. spray per acre by ground or 5 to 10 gals. spray per acre by air.  Apply when eggs or insects first appear.  Strawberry Root and Black Vine Weevil: For control, apply in water in a minimum of 40 gals. spray per acre by ground. Good spray coverage and canopy spray penetration is critical for control. Increase spray volume and pressure with tall or dense mint canopy. Apply after adult emergence is complete but prior to egg laying. Apply at dusk or during the night on a warm still evening.

- Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- Maximum 2 applications per crop season.
- Use a minimum spray interval of 7 days.
- Preharvest interval is 14 days.
- Do not use spent mint hay for feed for animals.
- Do not graze treated areas.

# NON-BEARING CITRUS (including newly planted groves & citrus nursery seedlings)

- Agricultural settings ONLY

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Aphids	1/2 lb.	All Applications: Apply in water at 100 to 200 gals. of
Grasshoppers	(8.0 oz.)	water per acre by ground application.
Katydid		All Ameliantians Committee distributions will assess
Mealybugs Orangedogs Plant Bugs		All Applications: Spray individual juvenile or non- bearing trees for coverage with total application not
Thrips		exceed specified rate in lbs. per acre. Length of residual
Whiteflies (except		activity will depend upon spray coverage and the amount
Sweetpotato/		of moisture following application.
Silverleaf Whitefly)		
Citrus Blackfly*	1/2 to 3/4 lb.	Apply when eggs or adult insects first appear.
	(8.0 to 12.0 oz.)	Use the high rate when a heavy infestation is present.
		Repeat application after 3 days for rates up to 0.52 lb. product/A (0.5lb. a.i./A) and repeat application after 7 days for rates greater than 0.52 lb. product/A (0.5 lb a.i/A) to maintain control.
Ants	Foliar spray	Repeat application after 7 days if necessary to maintain
(Excluding Fire, Harvester*,	3/4 lb.	control.
Carpenter, and Pharaoh	(12.0 oz.)	
Ants)	Soil Mound Treatment	Apply 1 gal. of mix to each mound area by sprinkling the
(Excluding Carpenter and	Drench Method	mound until it is wet and treat a four (4) foot diameter
Pharaoh)*	3/4 oz. / 5 gals.	circle around the mound.
	37 1 02. 7 0 gaid.	For best results apply the material in the early morning or late afternoon when the ants are most active.
Has Destrictions		Applications made under prolonged hot and dry conditions may be ineffective due to the location of the ants deep within the nest.

# Use Restrictions

- Use a minimum spray interval of 7 days.
- Do not graze treated areas.
- Do not harvest citrus for one year (365 days) after treatment.

# **NON-CROP AREAS**

# FIELD BORDERS, FENCEROWS, ROADSIDES, DITCHBANKS, BORROW PITS

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Grasshoppers	1/4 lb. (4.0 oz.)	Apply in water at 10 to 20 gals. spray per acre by ground or 1 to 5 gals. spray per acre by air (minimum 5 gals. per acre in CA).
		For early to mid-season application.
		Use the higher volumes when spraying dense foliage.
		An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.
Use Restrictions		

• Do not graze or feed vegetation cut from treated areas

<sup>\*</sup>Not registered for use in California for control of Citrus Blackfly or Harvester Ants.

# **NON-CROP AREAS**

# FIELD BORDERS, FENCEROWS, ROADSIDES, DITCHBANKS, BORROW PITS

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Ants	Drench Method: Mix	For best results apply the material in the early morning
Fire Ants and Harvester	3/4 oz. in 5 gals. of	or late afternoon when the ants are most active.
Ants* Only	water.	
		Applications made under prolonged hot and dry
	Apply 1 gal. of mix to each mound area by	conditions may be ineffective due to the location of the ants deep within the nest.
	sprinkling the mound until it is wet and treat a	Grass in treated area may be injured.
	four (4) foot diameter	
	circle around the	
	mound.	

## **Use Restrictions**

- Do not treat mound more than once per season.
- Do not graze animals.
- Do not feed treated grass/hay to dairy animals.
- Do not apply if lactating dairy cattle are present.
- Meat animals should be removed from treated areas at least 1 day before slaughter if they were present at application or grazed treated areas within 21 days of application.

# NURSERY STOCK: NON-BEARING DECIDUOUS FRUIT TREES, NUT TREES AND VINES IN NURSERY FIELD OR NONBEARING ORCHARDS

PLANTS	INSECTS	AMOUNT Omni Brand Acephate 97 SG PER	ADDITIONAL USE INSTRUCTIONS
Nursery stock (non- bearing Deciduous Fruit Trees, Nut Trees, Vines) Almond Apricot Apple Cherry Grape Kiwi Pear Pistachio Plum Prune Walnut	Aphids Plant bugs (Lygus) Thrips	0.5 to 1 lb. (8 to 16 oz.)	Ground Application: Apply in 50 to 100 gallons of water per acre in conventional equipment to ensure thorough coverage of the target plants.  Aerial Application: Apply in a minimum of 5 gallons of water per acre. Use sufficient carrier volume to provide thorough coverage.  Repeat application after 3 days for rates up to 0.52 lb. product/A (0.5lb. a.i./A) and repeat application after 7 days for rates greater than 0.52 lb. product/A (0.5 lb a.i/A) to maintain control.  Use higher rates within the specified range for severe insect infestations.

- For application only to non-bearing trees or vines in nursery fields or in non-bearing orchards.
- Do not apply to interplants or single trees in a bearing orchard.
- Do not harvest any fruit from sprayed trees for one year after application.
- Do not allow livestock to graze treated area.
- Do not exceed 1 lb/ product/A.

<sup>\*</sup> Not registered for use in California for control of Harvester Ants.

WASTELAND (NON-FOOD/NON-FEED PRODUCING AREAS)

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Black Grass Bugs Grasshoppers Mormon Crickets	1.5 to 2.0 oz.	Apply in water at 10 to 20 gals. spray per acre by ground or 0.5 gal. spray per acre by air (minimum of 5 gals. per acre in CA).
		Use the higher volumes when spraying dense foliage.
		An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.

## **Use Restrictions**

- Do not graze or feed vegetation cut from treated areas.
- Do not make more than one application per season.

# **PEANUTS FOLIAR APPLICATION**

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Grasshoppers	1/4 to 1/2 lb. (4.0 to 8.0 oz.)	For All Applications: Apply in water at 10 to 50 gals. spray per acre by ground or in 5 to 10 gals. spray per acre by air.
		Apply when eggs or insects first appear.
Thrips	3/8 to 3/4 lb.	OMNI BRAND ACEPHATE 97 SG can be tank mixed with at-cracking and early post emergence peanut herbicides, provided those products do not prohibit tank
ППР	(6.0 to 12.0 oz.)	mixes, provided the most restrictive of label limitations and precautions are observed, and provided no label dosage rates are exceeded.
		To determine physical compatibility, pour the listed proportions of each chemical with the same proportion of water as will be present in the chemical supply tank into a suitable container, mix thoroughly and allow to stand
Corn Earworm	3/4 to 1.0 lb.	for five minutes. If the combination remains mixed, or can be remixed readily, the mixture is considered
Fall Armyworm Leafhoppers	(12.0 to 16.0 oz.)	physically compatible. When mixing wettable powder or
Loopers		dry flowable formulations, add and disperse these first,
Velvetbean Caterpillar		then add liquid pesticides. Conduct another compatibility test at concentrations, which will be present in the
		irrigation lines. If there is any separation, which cannot be remixed readily, HELENA CHEMICAL, recommends
		that the combination not be used.

- Do not apply more than 4 1/8 lbs. (4.0 lb. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- Do not apply more than 4.0 lb. ai, this includes the use on peanuts as a foliar spray in addition to the peanut planter box seed treatment use.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including ½ lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Preharvest interval is 14 days.
- Do not feed treated forage or hay to livestock.
- Do not allow animals to graze treated areas.

PEPPERS, BELL (Crop Group 8-10 B)

El l'Ello, Belle (Glob Glodp G 10 B)			
INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS	
Grasshoppers	1/4 to 1/2 lb. (4.0 to 8.0 oz.)	Apply in water at or 25 to 150 gals. spray per acre by ground or 3 gals. spray per acre (minimum 5 gals spray per acre in CA) by air.	
Cabbage Looper	1/2 to 1.0 lb.	7	
Green Peach Aphid Tobacco Hornworm	(8.0 to 16.0 oz.)	Apply when eggs or insects appear.	
European Corn Borer	3/4 to 1.0 lb. (12.0 to 16.0 oz.)		

## **Use Restrictions**

- Do not apply more than 2 1/8 lbs. (2.0 lbs. ai) OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including ½ lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Preharvest interval is 7 days.

PEPPERS, NON-BELL (Crop Group 8-10 C) (For Use in Midwestern, Eastern States, and Puerto Rico Only)

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INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS	
Aphids	1/2 lb. (8.0 oz.)	Apply in water at 40 to 150 gals. spray per acre with ground equipment.	

#### **Use Restrictions**

- Do not apply more than 1.0 lb. (1.0 lb. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- Use a minimum spray interval of 3 days.
- Preharvest interval is 7 days

## **SOYBEANS**

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Grasshoppers Thrips	1/4 to 1/2 lb. (4.0 to 8.0 oz.)	For Foliar Application apply in in 10 to 50 gals. spray per acre by ground or 5 to 10 gals. spray per acre by air.
Potato Leafhopper Stinkbugs	1/2 to 1.0 lb. (8.0 to 16.0 oz.)	
Armyworms (except Beet) Bean leaf beetle Cabbage looper Green cloverworm Mexican bean beetle Soybean aphid Threecornered alfalfa hopper Velvetbean caterpillar	3/4 to 1.0 lb. (12.0 to 16.0 oz.)	

- Do not apply more than 1.5 lbs. (1.5 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including ½ lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Preharvest interval is 14 days.
- Do not graze or cut vines for hay or forage.

# **TOBACCO: GREENHOUSE TOBACCO FLOATBED APPLICATIONS**

(Except California)

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Cutworm Flea Beetle	3/4 lb. (12.0 oz.)	Apply to foliage at the equivalent of 1 tablespoon in 3 gal. of water per every 1,000 sq. ft. of bed.
Green Peach Aphid Tobacco Aphid		Apply evenly to ensure through coverage.
		Dispose of Floatbed water in the transplant field through the transplant water or through foliar spray.

## **Use Restrictions**

- Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar application.
- Use a minimum spray interval of 7 days.
- Preharvest interval is 3 days.
- NOT REGISTERED FOR USE IN CALIFORNIA

# **TOBACCO PLANT BED APPLICATIONS**

(Except California)

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Cutworm	3/4 lb.	Apply to foliage at the equivalent of 1 tablespoon in 3
Flea Beetle	(12.0 oz.)	gal. of water per every 1,000 sq. ft. of bed.
Green Peach Aphid Tobacco Aphid		Apply evenly to ensure through coverage.

#### **Use Restrictions**

- Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop
  cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar
  application.
- Use a minimum spray interval of 7 days.
- NOT REGISTERED FOR USE IN CALIFORNIA

# TOBACCO TRANSPLANT WATER APPLICATION (Except California)

Transplant water applications should be made using mechanical transplant equipment only. Using such equipment, the insecticide/water mixture is mechanically applied directly into the soil along with the transplanted plants.

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Cutworms Flea Beetle Green Peach Aphid Potato Tuberworm Tobacco Aphid Tobacco Thrips	3/4 lb. (12.0 oz.)	Apply in a minimum of 100 gals. of transplant water per acre. Should be pre-mixed in water to form a slurry solution prior to adding to the transplant water tank.  Provides control of early season flea beetles, green peach aphid, tobacco aphid, and cutworm for approximately 3 to 4 weeks after transplanting.
		For later season control of these insects, apply a foliar spray of OMNI BRAND ACEPHATE 97 SG.

Do not apply more than 3/4 lb. of OMNI BRAND ACEPHATE 97 SG per acre as a transplant-water application as some phytotoxicity may occur.
Make transplant water applications using mechanical transplant equipment only. Using such equipment, the insecticide/water mixture is mechanically applied directly into the soil along with the transplanted plants.

- Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop
  cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar
  application.
- NOT REGISTERED FOR USE IN CALIFORNIA

# **TOBACCO FOLIAR APPLICATION**

(Except California)

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Grasshoppers	1/4 to 1/2 lb. (4.0 to 8.0 oz.)	Apply in 10 to 50 gals. water per acre with ground equipment or a minimum of 3 gals. per acre by air.
Flea Beetle Green Peach Aphid Tobacco Hornworm Tobacco Thrips	1/2 lb. (8.0 oz.)	
Stinkbugs Tobacco Aphid Vegetable Weevils	1/2 to 3/4 lb. (8.0 to 12.0 oz.)	
Budworm Cabbage Looper Cutworm Japanese Beetle	3/4 lb. (12.0 oz.)	

# **Use Restrictions**

- Do not apply more than 4 1/8 lbs. (4.0 lbs. ai) of OMNI BRAND ACEPHATE 97 SG per acre per crop cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar application.
- For repeat applications, use a minimum spray interval of 3 days for application rates up to and including ½ lb. product per acre and a minimum of 7 days for rates exceeding 1/2 lb. product per acre.
- Preharvest interval is 3 days.
- NOT REGISTERED FOR USE IN CALIFORNIA

# **TOBACCO SOIL APPLICATION**

(Except California)

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE	ADDITIONAL USE INSTRUCTIONS
Ants (excluding carpenter, fire, harvester and pharaoh ants)	Drench Method: Mix 3/4 oz. in 5 gals. of water.  Apply 1 gal. of mix to each mound area by sprinkling the mound until it is wet and treat a four (4) foot diameter circle around the mound.	For best results apply the material in the early morning or late afternoon when the ants are most active.  Applications made under prolonged hot and dry conditions may be ineffective due to the location of the ants deep within the nest.

- Do not apply more than 4 1/8 lbs. (4 lbs. ai) per acre per crop cycle, this includes the use in transplant water, plant bed soil, floatbed (greenhouse), and foliar application.
- Treat maximum of 13 mounds per acre.
- Do not treat more than once per season.
- Preharvest interval is 3 days
- NOT REGISTERED FOR USE IN CALIFORNIA

# **CONTAINER GROWN NURSERY STOCK**

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PLANTS	INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Container Grown Nursery Stock (Arborvitae Azalea Camellia Rhododendron Roses Viburnum Yew)	Black Vine Weevil Strawberry Root Weevil	3/4 lb. (12.0 oz.)	Application should be made by of mid- September for greenhouse stock and by mid-October for outdoor stock. Consult your local county extension agent for information on the identification and control of root weevils on ornamentals.	Apply the specified amount OMNI BRAND ACEPHATE 97 SG per 100 gals. of solution so as to thoroughly drench the root system.
	Ants (excluding fire, harvester, carpenter, and pharaoh ants)	3/4 lb. (12.0 oz.)	Apply as needed to control the pest.	
Llos Postriotions	ants)			

## **Use Restrictions**

- Do not apply more than 3/4 lb. product per acre.
- Use a minimum spray interval of 7 days.
- Do not apply with low pressure hand wand.

# **ORNAMENTAL TREES AND SHRUBS**

PLANTS	INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Trees and Shrubs (except Flowering Crabapple see below)	Aphids Bagworms Birch Leafminer Tent Caterpillar* Lace Bugs Leafrollers	1/4 lb (4.0 oz.)	As the insects begin to appear.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG in 100 gals. water with a hydraulic sprayer.  The addition of a
	Douglas Fir Tussock Moth Larvae Gypsy Moth Larvae* Webworms	1/2 lb. (8.0 oz.)	As the insects begin to appear.	suitable sticker improves control of Gypsy Moth larvae.  * Mist blower application.
	Scales (Crawler)	1/2 lb. (8.0 oz.)	As crawlers begin to appear. Repeat applications at a 2 week or more interval. May be necessary where there is continuous crawler production.	Adjust rates to 1.0 lb. per 100 gals. water for Gypsy Moth control and 3/4 lb. per 100 gals.

				water for Tent
	Ponderosa Pine Needle	1/2 lb.	Time of application is	Caterpillar control.  Apply the specified amount of OMNI
	Miner	(8.0 oz.)	important. Consult your Farm advisor or County Extension Agent.	BRAND ACEPHATE  97 SG in 100 gals.
	Grasshoppers	1/2 lb. (8.0 oz.)	As the grasshoppers begin to appear.	water with a hydraulic sprayer as
	California Oakworm	1/4 to 1/2 lb. (4.0 to 8.0 oz.)	As the insects begin to appear.	a full coverage spray.
	Cankerworms (Spring and Fall)		Use the higher amount when the larger larvae are present.	
	Nantucket Pine Tip Moth Larvae	3/4 lb. (12.0 oz)	Time of application is important. Consult your Farm Advisor or County Extension Agent. Repeat applications will be required for subsequent generations.	
	Root Weevil Adults	3/4 lb. (12.0 oz)	Apply when first feeding damage occurs. Repeat applications at 4 week intervals until the first heavy frost, may be necessary for complete foliage protection.	
	Box Elder Bugs Sawflies Budworms Leafhoppers	3/4 lb. (12.0 oz)	As the insects begin to appear.	
	Japanese Beetle	1.0 lb. (16.0 oz.)	As the Japanese Beetles begin to appear. Repeat applications at 2 week intervals may be necessary.	
	Elm Leaf Beetle (larvae)	1.0 lb. (16.0 oz.)	As the larvae begin to appear. OMNI BRAND ACEPHATE 97 SG will not prevent Elm Leaf Beetle eggs from hatching.	
Douglas Fir	Douglas Fir Needle Midge	1/2 lb. (8.0 oz.) (1/2 lb. per acre)	Application should be made no more than 2 weeks prior to bud burst.  For additional pest management information, consult your county extension service.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG in not less than in 100 gals of spray per acre by ground or 2 gals. of spray per acre by air.
				Do not make more than one application per season.
Flowering Crabapples	Aphids Tent Caterpillars Leafrollers	1/4 lb. (4.0 oz)	As the insects begin to appear.  Do not apply more often than 3 times in a growing season at a 4 week interval.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG in 100 gals. water with a hydraulic sprayer.
			Do not apply more than 1/4 lb. product per acre/ 100 gallons of water.	Phytotoxicity has occurred on the

				following Crabapple varieties: Hops, Ichonoski. Malusfloribunda, Pink Perfection, Red Wine and Snow Cloud.
Crepe Myrtle	Aphids	2.0 to 3.0 level tsp. (0.6 to 0.8 oz.) Per tbsp. water as paint on*	As aphids begin to appear.	

<sup>\*</sup>Make a paint-on slurry by mixing the specified amount of OMNI BRAND ACEPHATE 97 SG with 6 to 8 tablespoons of water.

Remove the loose bark from the trunk areas to be treated. Completely paint a band around each trunk to a width twice its diameter. Application should be made to trunks within a zone 6 to 12 inches above the ground and below the point where branching begins. For multi-trunk plants, be certain to treat all trunks. For either single or multi-trunk plants, application should be made as low as possible within the recommended treatment zone.

#### **Use Restrictions**

- Do not apply to Huckleberry, Balm of Gilead, Cottonwood, Lombardy Poplar, and Viburnum suspensum
- Nursery crops: Before treating large plantings, spray only a few plant and observe two weeks for Phytotoxicity
- Do not apply more than 1.0 lb. product per acre per 100 gallons of water.
- Do not apply more than 3 times in a growing season to trees and shrubs.
- Apply at a minimum of 2 week intervals unless otherwise indicated
- Do not apply with low pressure hand wand

## **GOLF COURSE TURF GRASS**

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Fall Armyworm Yellow Striped Armyworm Southern Armyworm	0.4 to 0.9 oz. (1.1 to 2.5 lbs. per acre)	As the insects appear. Repeat application at 14 day intervals as needed.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per 1,000 sq. ft. Use a minimum of 5 gals. water per 1,000 sq. ft. to obtain good coverage.
Cutworm	0.9 to 1.5 oz. (2.5 to 4.12 lbs. per acre)		Use higher rates within the specified range for severe insect infestations
Chinch bugs	0.9 to 1.5 oz. (2.5 to 4.12 lbs. per acre)	Apply as needed for adult population knockdown.  Repeat application at 10 to 14 day intervals as needed.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per 1,000 sq. ft. Use 1 to 15 gals. water per 1,000 sq. ft. to obtain good
Sod Webworm (Crambus spp.)	0.4 to 0.8 oz. (1.0 to 2.2 lbs. per acre)	As sod webworms begin to appear.  Use the higher amount when quick knockdown is needed or with heavy infestations.  Repeat application at 7 to 14 day intervals as needed.	coverage.  Use higher rates within the specified range for severe insect infestations.
Leafhopper	0.75 oz. (2.0 lbs. per acre)	As the leafhoppers begin to appear.  Repeat application at 7 day intervals as needed.	
Mole Crickets* (Except CA) Spittlebug (Except CA)	0.8 to 1.4 oz. (2.2 to 4.0 lbs. per acre)	As mole crickets begin to appear. For knockdown of existing populations, more than one	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per 1,000 sq. ft. Use 1 to 15 gals. water per 1,000

		application may be required throughout the growing	sq. ft. to obtain good coverage.
		For heavy infestations, use the higher dosage rate.  Repeat applications at 7 to 14	Apply during late afternoon or early evening hours and after irrigation. Do not irrigate after application.
		day intervals as needed.	Use higher rates within the specified range for severe insect infestations.
thus provide increase shown to be effective pure lemon fragrance	ed mole cricket contact with t flushing agents: Lemon Joy		-scented products have been yrt Products Manufacture- Base
Greenbug (Schizaphis graminun) Grasshoppers	0.4 oz. (1.0 lbs. per acre)	Apply when insects or their damage first appears.  Repeat application at 7 to 14 day intervals as needed.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG. Use 4 gals. of water per 1,000 sq. ft. to obtain good coverage.
			Do not mow for at least 24 hours after application.
Black Turfgrass Ataenius (Except CA)	0.8 to 1.4 oz. (2.2 to 4 lbs. per acre)	Apply when the insects appear.  Repeat at 14 day intervals as necessary	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per 1,000 sq. ft. Use a minimum of 5 gallons water per 1,000 sq ft. Irrigate lightly after application (not more than 1/2 inch). Use the higher listed rate for severe infestations.
			Use higher rates within the specified range for severe insect infestations.
In sites with Dichondra as a desirable ground cover: Cutworm Flea Beetle Southern Armyworm Yellow Striped	0.8 to 1.4 oz. (2.2 to 4 lbs. per acre)	Apply when the insects appear.  Repeat at 14 day intervals as necessary	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per 1,000 sq. ft. Use a minimum of 5 gallons water per 1,000 sq ft. Irrigate lightly after application (not more than 1/2 inch). Use the higher listed rate for severe infestations.

Armyworm

- Maximum Application Rate for Golf Course Turf: 4.12 lbs. product/A.
- Preharvest interval is 3 days.
- Aerial applications are prohibited.
- Do not allow livestock to graze.
- Do not feed treated grass to livestock.

Do not allow livestock to graze treated areas. Do not feed treated grass to livestock. Use is limited to sod farms and golf courses, except when applying by mound or spot treatment for fire ant and harvester ant control. Aerial application to turf is prohibited.

Use higher rates within the specified range for severe insect infestations.

# **SOD FARM TURFGRASS**

INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Fall Armyworm Yellow Striped Armyworm Southern	0.4 to 0.9 oz. (1.1 to 2.5 lbs. per acre)	As the insects appear. Repeat application at 14 day intervals as needed.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per 1,000 sq. ft. Use a minimum of 5 gals. water per 1,000 sq. ft. to obtain good coverage.
Armyworm Cutworm	0.9 to 1.1 oz. (2.5 to 3.09 lbs. per acre)		Use higher rates within the specified range for severe insect infestations
Chinch bugs	0.9 to 1.1 oz. (2.5 to 3.09 lbs. per acre)	Apply as needed for adult population knockdown.  Repeat application at 10 to 14 day intervals as needed.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per 1,000 sq. ft. Use 1 to 15 gals. water per 1,000 sq. ft. to obtain good
Sod Webworm (Crambus spp.)	0.4 to 0.8 oz. (1.0 to 2.2 lbs. per acre)	As sod webworms begin to appear.  Use the higher amount when quick knockdown is needed or with heavy infestations.  Repeat application at 7 to 14 day intervals as needed.	coverage.  Use higher rates within the specified range for severe insect infestations.
Leafhopper	0.75 oz. (2.0 lbs. per acre)	As the leafhoppers begin to appear.  Repeat application at 14 day intervals as needed.	
Mole Crickets* (Except CA) Spittlebug (Except CA)	0.8 to 1.1 oz. (2.2 to 3.09 lbs. per acre)	As mole crickets begin to appear. For knockdown of existing populations, more than one application may be required throughout the growing season. For heavy infestations, use the higher dosage rate. Repeat applications at 7 to 14 day intervals as needed.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per 1,000 sq. ft. Use 1 to 15 gals. water per 1,000 sq. ft. to obtain good coverage.  Apply during late afternoon or early evening hours and after irrigation. Do not irrigate after application.  Use higher rates within the specified range for severe insect infestations.
thus provide increase shown to be effective pure lemon fragrance	ed mole cricket contact with t flushing agents: Lemon Joy	pray mix may enhance control by the acephate. The following lemon t, Lemon Palmolive, and Mighty Mon-scented products is 2 teaspoor for large mix volume.	-scented products have been yrt Products Manufacture- Base
Greenbug (Schizaphis graminun) Grasshoppers	0.4 oz. (1.0 lbs. per acre)	Apply when insects or their damage first appears.  Repeat application at 14 day intervals as needed.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG. Use 4 gals. of water per 1,000 sq. ft. to obtain good coverage.  Do not mow for at least 24
In sites with Dichondra as a desirable ground cover:	0.8 to 1.4 oz. (2.2 to 4 lbs. per acre)	Apply when the insects appear.  Repeat at 14 day intervals as	hours after application.  Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per 1,000 sq. ft.

Cutworm	necessary	Use a minimum of 5 gallons
Flea Beetle		water per 1,000 sq ft. Irrigate
Southern		lightly after application (not
Armyworm		more than 1/2 inch).
Yellow Striped		Use the higher listed rate for
Armyworm		severe infestations.
		Use higher rates within the
		specified range for severe
		insect infestations.
		msect intestations.

- Maximum Application Rate for Sod/Turf: 3.09 lbs. product/A.
- Preharvest interval is 3 days.
- Aerial applications are prohibited.
- Do not allow livestock to graze.
- Do not feed treated grass to livestock.

Do not allow livestock to graze treated areas. Do not feed treated grass to livestock. Use is limited to sod farms and golf courses, except when applying by mound or spot treatment for fire ant and harvester ant control. Aerial application to turf is prohibited.

# MOUND TREATMENT OF FIRE ANTS AND HARVESTER ANTS IN TURFGRASS

PLANT	INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Turfgrass Residential, Recreational and Commercial Turf	Fire Ants and Harvester Ants (Only)	Drench Method: Mix 3/4 oz. in 5 gals. of water.  Apply 1 gal. of mix to each mound area by sprinkling the mound until it is wet and treat a four (4) foot diameter circle around the mound.	For best results apply the material in the early morning or late afternoon when the ants are most active.  Applications made under prolonged hot and dry conditions may be ineffective due to the location of the ants deep within the nest.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG as directed. Grass in treated area may be injured.

## Use Restrictions

- Use as a mound treatment only: only for use on fire ants and harvester ants. Not registered for use in California for control of Harvester Ants.
- Do not treat mound more than once per season.
- Preharvest interval is 3 days
- Do not allow livestock to graze treated areas.
- Do not feed treated grass to livestock.

# **OUTDOOR AND PERIMETER SPRAY EXCLUDING RESIDENTIAL TURF**

LOCATION	INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Outdoor and perimeter area excluding residential turf	Wasps	1.2 oz.	Treat early or late in the day as wasps are generally less active during these times.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG per each gallon of water used.  Apply as a spot treatment to the nest, nest entrance, and surrounding areas where the wasps alight.

Ants (excluding fire, harvester, carpenter, and pharaoh ants)	1.2 oz.	As the insects appear.	Apply specified amount of OMNI BRAND ACEPHATE 97 SG per each gallon of water used.
Crickets Cockroaches Earwigs Pillbugs			Apply to a band of soil 6 to 10 feet adjacent to the structure and to a height of 2 to 3 feet on the foundation where pests may be active or may find entrance.
			Also apply as a residual spray or with a paint brush to surfaces of buildings, window frames, shutters, entryways, screens, eaves, patios, garages, carports, around garbage areas and other areas where these pests
H. B. C. C.			congregate.

- The use of low pressure handwand equipment for perimeter or wasp treatments is prohibited.
- Do not allow livestock to graze treated areas.
- Do not feed treated grass to livestock.
- Not for us on residential turf grass

# **OUTDOOR FLORAL CROPS AND GROUND COVERS**

PLANT	INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Chrysanthemums Daisies Dahlias Gladioli Gyposophila Lilies: including Easter Lily Calla Lily Pachysandra Peony Roses Sedum Statice Strawflower Yarrow Zinnia	Aphids Thrips Lygus	1/2 lb. (8.0 oz.)	As insects begin to appear.  Repeat applications at 2 week intervals may be necessary.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG in 100 gals. water with a hydraulic sprayer as a full coverage spray.  Multiple applications may cause slight tip burn or marginal leaf necrosis on some varieties. Test on a few plants to determine varietal susceptibility.
Roses	Japanese Beetles	3/4lb. (12.0 oz.)	As the Japanese Beetles begin to appear. Repeat applications at 2 week intervals may be necessary.	

- Do not apply more than 12 oz. product per acre per 100 gallons of water.
- Do not apply with low pressure hand wand.
- Do not use on cut flowers.
- Do not apply more often than once every 28 days to chrysanthemums.

# **OUTDOOR FLORAL CROPS -CUT FLOWERS**

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PLANT	INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Chrysanthemums Daisies Dahlias Gladioli Gyposophila Lilies: including Easter Lily Calla Lily Pachysandra Peony Roses Sedum Statice Strawflower Yarrow Zinnia	Aphids Thrips Lygus	1/2 lb. (8.0 oz.)	As insects begin to appear.  Repeat applications at 2 week intervals may be necessary.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG in 100 gals. water with a hydraulic sprayer as a full coverage spray.  Multiple applications may cause slight tip burn or marginal leaf necrosis on some varieties. Test on a few plants to determine varietal
Roses	Japanese Beetles	3/4lb. (12.0 oz.)	As the Japanese Beetles begin to appear. Repeat applications at 2 week intervals may be necessary.	susceptibility.

# **Use Restrictions**

- Do not apply more than 0.77 lb. product per acre (3/4 lb. a.i. per acre) to cut flowers.
- Do not apply with low pressure hand wand.
- Do not apply more often than once every 28 days to chrysanthemums

# COMMERCIAL GREENHOUSE FLORAL AND FOLIAGE PLANT CROPS

PLANT	INSECTS	AMOUNT OMNI BRAND ACEPHATE 97 SG PER ACRE PER 100 GALS.	TIME OF APPLICATION	ADDITIONAL USE INSTRUCTIONS
Roses	Leafrollers	1/2 to 3/4 lb. (8.0 to 12.0 oz.)	As leafrollers begin to appear.  Use the higher amount when large larvae are present.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG in 100 gals. water with a hydraulic sprayer as a full coverage spray. Application to roses in flower may result in flower damage
Foliage Plants Anthuriums Cacti	Aphids	1/4 lb. (4.0 oz.)	As aphids begin to appear.	Apply the specified amount of OMNI BRAND ACEPHATE 97
Orchids Poinsettia	Mealybugs Thrips	1/2 lb. (8.0 oz.)	As the insects begin to appear.	SG in 100 gals. water with a hydraulic sprayer

	Whiteflies		A repeat application at a 2 week interval may be necessary for control of mealybugs and whiteflies.	as a full coverage spray. The addition of a wetting agent may be required on difficult to wet foliage. Caution: Phytotoxicity
	Scales (Crawlers)	1/2 lb. (8.0 oz.)	As crawlers begin to appear.  Repeat applications at a 2 week or more interval may be necessary where there is continuous crawler production.	has occurred on the following foliage plants: Bletchum gibbum, Cissus antarctica, Ficus triangularis, Fittonia verschaffeltii, Maranta leuconeura kerchoveana, Plectranthus lutes, Plectranthus australis, Polypodium aureus, Polystichum. Pteris ensiformis, Tolmiea menziesii. Before treating large plantings spray only a few plants and observe 2 weeks for varietal phytotoxicity. Application of OMNI BRAND ACEPHATE 97 SG on Poinsettias after bract formation may result in phytotoxicity on certain varieties.
Foliage Plants Anthuriums Cacti Orchids Poinsettia	Sweetpotato/ Silverleaf Whiteflies (Except CA)	1/4 lb. (4.0 oz.) plus TAME® 2.4 EC 10 2/3 fl. oz. (0.2 lb. ai)	Apply when insects first appear.  If a population is well established, make one application of the tank mix and follow 5 to 7 days later with TAME® alone at 16 fl. oz/100gal.  See TAME® label for instructions.	For Sweetpotato/ Silverleaf whitefly control, apply the specified amount of OMNI BRAND ACEPHATE 97 SG plus TAME® 2.4 EC.  Spray as a tank mix at a volume necessary to obtain good coverage.  Follow the TAME® label for specific instructions on the alternation of TAME® plus OMNI BRAND ACEPHATE 97 SG and TAME® alone and the rotation instruction to avoid potential resistance.
Roses Carnations Chrysanthemums	Aphids Thrips	1/2 lb. (8.0 oz.)	As aphids begin to appear.  As thrips begin to appear or at the tight flower bud stage. Repeat applications may be necessary.	Apply the specified amount of OMNI BRAND ACEPHATE 97 SG in 100 gals. water with a hydraulic sprayer as a full coverage spray.  Application to

	Chrysanthemums and Roses with open flowers may result in flower damage.
	Caution: Phytotoxicity has occurred on the following Chrysanthemum varieties: Albatross. Bonnie Jean, Dixie, Garland. Gent, Iceberg. Pride, Showoff. Statesman, Tally Ho, Westward Ho, and Wild Honey. Before treating large Chrysanthemum plantings, spray only a few plants and observe
	two weeks for varietal phytotoxicity.

- Do not apply more than 3/4 lb. product per acre per 100 gallons of water to roses
- Do not apply more than 1/2 lb. product per acre per 100 gallons of water for Anthuriums, Cacti, Foliage Plants, Orchids, Poinsettia, Carnations, Chrysanthemums, and Roses.
- Do not apply more than 1/4 lb. product per acre per 100 gallons of water for Silverleaf Whitefly and Sweet potato Whitefly.
- Retreatment interval is 14 days for Roses and 28 days for Carnations and Chrysanthemums.
- Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.
- Do not apply with low pressure hand wand.

## **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

## **PESTICIDE STORAGE:**

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of reach of children, preferably in a locked storage area.

Do not store above 100°F for extended periods of time. Storage below 20°F can result in formation of crystals. If product crystallizes, store at 50°F to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

#### **PESTICIDE DISPOSAL:**

Open dumping is prohibited. Pesticide wastes are toxic. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

# **CONTAINER HANDLING:**

## **NONREFILLABLE CONTAINERS:**

# Rigid, Nonrefillable containers small enough to shake (i.e. with capacities equal to less than five gallons).

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

# Rigid, Nonrefillable containers that are too large to shake (i.e. with capacities greater than 5 gallons or 50 lbs.).

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

## **REFILLABLE CONTAINERS:**

Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

# **REFILLING OR RETURNING CONTAINERS:**

If refilling or returning container is planned, end users are not authorized to remove tamper evident cables, one way values or clean container.

#### RECYCLE OR DISPOSAL OF CONTAINERS:

End users are authorized to remove tamper evident cable as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. Instructions for container rinsing and either recycling or disposal are as follows:

# Bottom Discharge IBC (e.g. Schuetz Caged IBC or Snyder Square Stackable).

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g. Snyder 120 Next Gen, Bonar B120, Drums and Kegs). Triple rinsing the container before final disposal is the responsibility of the person disposing of the container.

Cleaning before refilling is the responsibility of the refiller. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill

the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

# CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and must be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. To the extent consistent with applicable law, the Company makes no other warranties or representations of any kind; express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

- 1. Refund of the purchase price paid by buyer or user for product bought, or
- 2. Replacement of the product used

To the extent consistent with applicable law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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